**Claim Validity of Print Advertisements Found in Otolaryngology Journals**

Anthony G. Del Signore, MD, PharmD; Jason Machan, PhD; Jeffrey H. Spiegel, MD, FACS

1Warren Alpert Medical School of Brown University, 2Department of Research, Rhode Island Hospital, 3Otolaryngology-Head and Neck Surgery, Boston University School of Medicine

**ABSTRACT**

**Educational Objective:** At the conclusion of this presentation, the participants should be able to describe the degree to which product claims made in print advertisements within prominent Otolaryngology journals are supported by scientific evidence.

**Objectives:** To evaluate the accuracy and scientific evidence supporting product claims made in print advertisements within prominent Otolaryngology journals.

**Study Design:** Cross-sectional survey with literature review, and multi-author evaluation.

**Methods:** Fifty claims made within 23 unique advertisements found in prominent Otolaryngology journals were selected. References to support the claims were provided within the advertisement or obtained through direct request of the manufacturer. Five academic otolaryngologists with varying training and geographic practice location reviewed the claims and supporting evidence. Each physician had significant experience as an editorial reviewer, and several had specific training in research methodology and scientific methods.

**RESULTS**

An extensive body of literature exists regarding the validity of advertisement claims found in various journals across medical specialties. For example, previous investigators have shown that 44 - 50% of the statements made in sampled advertisements are poorly supported by the scientific evidence provided. In the present study, despite 68% of the sampled claims associated with moderate to strong research evidence, we observed 58% of the claims were not supported by the provided reference materials. This data calls into question the confidence that physicians often place in utilizing this medium as a means of augmenting medical knowledge and applying it to patient care without substantiating the claims themselves.

One limitation we experienced, as noted by other investigators, was the relatively low inter-rater reliability when examining reviewer responses. The various research experience of the reviewers could have accounted for this observation, but given the relative similarities of our reviewers, makes this possibility less likely. The need for manufacturers to provide claims and utilize clear supporting data that can be easily interpreted by physicians regardless of research experience is further illustrated by these results.

In the present study, reviewers had full access to the associated reference materials for each selected claim. Unfortunately, due to time constraints in the real world of medical practice, readers often blindly accept statements as fact without substantiating the validity and accuracy of the supporting data ultimately jeopardizing patient care.

**CONCLUSIONS**

This study showed that over half of the claims made in print advertisements within the selected sample of advertisements are not sufficiently supported by the provided reference materials. Furthermore, the disagreement encountered by reviewers evaluating the same pieces of supporting data calls into question the clarity of such documents and its utilization in support of various advertisement claims.

With the increasing number of advertisement claims being submitted to regulatory agencies and the dwindling funds appropriated to review these materials, it is imperative that journal editors take a critical look at this important mediary in patient care.

**REFERENCES**


